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Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY

Project Report No. 85-A15

POLITICS, MARKETS, AND THE ORGANIZATION OF SCHOOLS

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John E. Chubb and Terry M. Moe are both senior fellows at The Brookings Institution.

The research for this report was supported by funds from the National Institute of Education (Grant No. NIE-G-83-0003). The paper was prepared for delivery at the Annual Meeting of the American Political Science Association, New Orleans Hilton, New Orleans, LA, August 28 - September 1, 1985. The analyses and conclusions do not necessarily reflect the views or policies of these organizations.

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Abstract

If public and private schools differ in their effects on student achievement, what accounts for the difference? Teachers and administrators from approximately 500 of the High School and Beyond Schools, including almost all of the private schools were administered questionnaires, and their responses permit detailed descriptions of schools — their relationships with parents and outside authorities, their leadership, their organizational structure, their interpersonal relationships, and their educational environments and practices. When these data are merged with existing HSB data, they offer healthy prospects for explaining the differences in school performance that have been observed, but not understood. This paper takes a first step in exploring the differences in organization of public and private schools, with an aim toward understanding how those differences determine relative school performance. Schools generally strive to be effective and have a reasonable idea of what it takes. But not all succeed, and variations in performance are great. The general explanation explored in this paper is that the school environment exerts important and systematic influences over the development of the organizational characteristics necessary for success. By comparing public and private schools we hope to show not only how those influences differ across sectors, but how they may work more generally.

Acknowledgment

We gratefully acknowledge the research assistance of Charles Stewart and David Fallek, and the research support of the National Institute of Education, and the Institute for Research on Educational Finance and Governance at Stanford University.

The ongoing debate over the causes of school effectiveness has heated up considerably with the emergence of evidence that one of the main causes may be the sector in which a school resides--that is, whether it is public or private. Among comparable students with comparable backgrounds, it has been found that Catholic schools, and to a lesser extent other private schools, produce significantly greater gains in achievement than public schools. Coleman, Hoffer and Kilgore, who fueled the school effectiveness controversy with this conclusion in their seminal 1982 book, High School Achievement, estimated that the difference between Catholic and public school performance may be equivalent to as much as a full year of learning and the difference between other private and public performance perhaps half that. Although these inferences about achievement were challenged on many grounds (e.g., Goldberger and Cain, 1982), they have since withstood the test of additional data. The high school sophomores from the original study were retested during their senior year so that actual achievement could be measured. Levels of improvement, analyzed in Hoffer, Greeley, and Coleman (1984), continue to show substantial sectoral effects. With the added weight these results derive from the huge survey upon which they are based--the "High School and Beyond" (HSB) longitudinal study of nearly 60,000 public and private students in more than 1000 schools--the work of Coleman and his associates has had a deservedly large influence on the search for the causes of effective schools.

The search nonetheless remains mostly before us. After a raft of analyses of the HSB data by Coleman and his associates as well as their critics, a fundamental question remains unanswered: If public and

private schools differ in their effects on student achievement, what accounts for the difference? Is it a set of factors that varies inherently across the sectors? Or is it a set of factors that also explains variation in the performance of public schools? It is not enough to know that performance in the public and private sectors differs. If we are to understand the causes of effective schools, we must explain why performance differs. Unfortunately, existing HSB data do not provide much of an opportunity to do that. Those data provide unusually rich information about student achievement, activities, attitudes, and background, but only nominal information about the structure and operation of the schools. Principals were surveyed for data primarily available in school records, and teachers were queried only superficially. As a result, the HSB data virtually preclude serious investigation of school-based determinants of student performance.

To rectify this problem, we and several colleagues designed and directed an "Administrator and Teacher Survey" (ATS) of approximately 500 of the HSB schools, including almost all of the private schools, with questionnaires administered in each school to the principal, a guidance counselor, a vocational director, and 30 teachers (see Appendix A). The responses to that survey permit detailed descriptions of schools--their relationships with parents and outside authorities, their leadership, their organizational structure, their interpersonal relationships, and their educational environments and practices. When these data are merged with existing HSB data, they offer healthy prospects for explaining the differences in school performance that have been observed, but not understood. In this paper we take the

essential first step toward that end by exploring the differences in the organization of public and private schools. Little that is systematic or reliable is known about the similarities and differences of schools in the two sectors. Yet, clearly that information is a prerequisite for understanding relative school performance. The Administrator and Teacher survey, with a national sample of schools, nearly 12,000 respondents, and organizational coverage from outside the school to inside the classroom, provides the first sound basis for comparisons of the nation's alternative school systems.

Such a comparison promises more, however, than a foundation for explaining why private schools may perform better than public schools. It should help explain school performance generally. One of the central issues addressed in our comparison of public and private schools is precisely the issue that research on school effectiveness (reviewed in Purkey and Smith, 1983) has tended to ignore. That is, what accounts for the success or failure of schools in developing the characteristics that are thought to enhance school performance? Research into school effectiveness has excelled in isolating factors associated with strong academic performance. But as important as it may be to know that factors such as strong instructional leadership, clear school goals, an academic school ethos, and high teacher expectations are found in effective schools, it is plainly not enough. All, or surely most, schools strive to be effective and have a reasonable idea of what it takes. But not all schools succeed, and variations in performance are great. The ultimate goal of school effectiveness research must be to understand why and how some schools develop the characteristics for effective performance while others do

not. The general explanation explored in this paper is that the school environment exerts important and systematic influences over the development of the organizational characteristics necessary for success.

By comparing public and private schools we hope to show not only how those influences differ across sectors but how they may work more generally. To be sure, public and private schools exist in very different environments, the former characterized more by politics, hierarchy, and authority, and the latter more by markets, competition, and voluntarism. However, the differences these environments make for school organization may not be due entirely, or even primarily, to qualities that are inherently public or private. Rather, organizational differences may derive from environmental characteristics such as control, constraint, and complexity that differentiate school environments regardless of sector. The Administrator and Teacher Survey enables us to measure a number of these general environmental characteristics as well as a range of organizational attributes that research on effective schools has indicated are important to school performance. To the extent that the attributes of effectiveness are found in different amounts across the sectors, we have the basis for an organizational explanation of the differences in public and private sector performance found by Coleman and his associates. To the extent that the differences in public and private school environments can be described by dimensions characteritic of all school environments we will have much more—namely, a foundation for an explanation of school effectiveness generally.

An Environmental Perspective on School Organization

While research on schools has unearthed a wealth of interesting information on topics that are surely relevant to an understanding of school performance, much of this work neither derives from nor gives rise to a coherent view of the whole. Components of the education process are studied in isolation from one another, with full appreciation of their intricacies and special characteristics, but with little sustained attention to the larger question of how all these pieces fit together. It is fair to say that there has been a tendency to revel in complexity, to proceed as though our understanding increases in direct proportion to the number of relevant variables we can identify and include in the analysis. Researchers who simplify--for example, Coleman and his associates--are criticized for the host of factors they have left out (e.g., Murnane, 1982) rather than commended for the economy, clarity, and explanatory power their simple models have achieved. Although school performance is unquestionably a complicated issue fraught with subtleties, that is no justification for theoretical incoherence, for failing to see the forest for the trees. Our approach to the issue of school performance is decidedly focused on the big picture.

We begin with a general perspective on schools that emphasizes that the school is an organization. Much as any other organization, a school survives, grows, and adapts through constant exchange with an environment--comprised, in this case, of parents, administrators, politicians, demographic changes, socioeconomic conditions, and a range of other forces that variously generate support, opposition, stress, opportunities for choice, and demands for change. Internally, it has

its own distinctive structures and processes, its own culture of norms, beliefs, and values, and its own technology for transforming inputs into outputs. The organization and its environment together constitute a system of behavior in which, as the saying goes, everything is related to everything else: the environment shapes the internal organization, the organization generates outputs, and outputs in turn have a variety of reciprocal effects on both the organization and its environment. The result over time is an iterative process of impact and adaptation.

It is impossible to capture all this richness in theory and research. It is undesirable as well. The key is to put this sort of organizational framework to use in simplified form, retaining only those elements most salient to the explanation. Ultimately, our focus is on the construction of two interrelated models. The first attempts to explain organizational characteristics, the second attempts to explain outputs. The organizational model allows for the impact of environment and outputs on school organization, as well as for reciprocal relationships among the organizational elements themselves. The output model understands important school products in terms of environmental and organizational influences. In this paper we report the results of our initial steps toward constructing the first of these two models, that is, the relationship between the school and its environment.

The school environment has for years been acknowledged as a powerful influence on the organization and operation of the school. Theoretical work on schools (e.g., Weick, 1976; Hanson, 1979) has abandoned the "four walls" conception of the isolated institution run

according to professional standards and judgements, and replaced it with the "open system" perspective (Lawrence and Lorsch, 1967) of the buffeted institution subject to stormy environments both within and without. Practical work on schools has also made the transition. Texts on school leadership (e.g., Morris, Crowson, Porter-Gehrie, and Hurwitz, 1984) now emphasize the importance of political mediation and community relations skills for successful principals. But empirical work has failed to take the environment seriously. Rigorous analyses of school organization and performance continue to concentrate on the internal dynamics of the school. Anecdotal evidence and spotty case studies remain the primary sources of our understanding of the school environment. Not only are we unclear about the effects of environmental variations on school organization, we even lack a clear conception of how environments vary in the first place.

A comparison of public and private schools is a good way to begin clarifying these matters because the differences between their environments may represent the total variation in school environments generally. Private schools, after all, have considerable freedom to choose their environments, and presumably choose ones that are relatively friendly. Public schools have their environments imposed on them, and have no way to ensure that theirs are even benign. The benefit of comparing the public and private sectors is therefore the prospect of capturing major differences in the quality of relationships between schools and their environments--in the demands the environment imposes, in the resources it provides, and in the pressures and constraints it applies as the school attempts to keep the environment satisfied. To the extent that the environments do differ

substantially, the prospect of observing organizational consequences is also enhanced: school leadership, rules and structure, and staff relations ought to differ substantially too. But before looking at any of these things in the ATS schools, it is essential to understand the fundamental differences between the provision of education in the public and private sectors. These differences provide the basis for explanations of a host of differences in public and private schools observed in the subsequent analysis.

First, and foremost, public and private schools differ in their systems of governance. Public schools are governed by legitimate democratic authority. They are established, ruled, and supported by local, state, and to some degree the federal government, and they are ultimately controlled by the people--the parents and other adult members of the local school district, the citizens of the state, and even the citizens of other states. As a result, public schools are legally obligated to satisfy all democratically expressed demands that are made of them. Among the most important of these demands is that a public school educate the children of every parent who, by virtue of residence, has a legal right to participate in the governance of the school. Private schools, by contrast, are not governed in any democratic sense; they are owned and managed. Parents have no legal right to participate in their operation. Private schools are legitimately controlled by their owners, who are entitled to contract to satisfy whatever parental demands and to educate whatever children they choose. In sum, public schools are forced to satisfy all legitimate demands from an environment over which they have no control

while private schools are free to select a set of demands and an environment that they believe they can satisfy efficiently.

It follows from the difference in governance that public and private schools will also differ in administration. In particular, the environments of public schools are likely to be administratively more complex than the environments of private ones. To be sure, schools in both sectors may find themselves embedded in extensive hierarchies--the public subject to a powerful superintendent and a large, bureaucratic central office, the private subject to umbrella organizations such as an archdiocese. But however byzantine the respective supervisory structures, the public structure is almost bound to be more so. It embodies the demands of several levels of government, each of which is providing resources, imposing regulations, and trying to realize various objectives. The demands on public schools therefore go well beyond those of the parents whose children are in attendence. Indeed, they can be quite numerous, and coming from uncoordinated sources, they can be contradictory and confusing as well. Private hierarchies are very different. Because they are largely free from legitimate government authority, private hierarchies tend to rise to a single peak, a sole authority, such as a governing board. They consequently embody fewer and less contradictory demands--and display less complex administrative structures.

The third and final difference between the sectors involves their finance. Public schools have their resources allocated to them by authorities who do not directly consume their services while private schools receive their resources in a direct exchange for services rendered. The resources of public schools are therefore less closely

connected to the school's performance. Effectiveness may be rewarded by the environment or it may not; the same is true of ineffectiveness. Public schools therefore operate under considerable uncertainty, never confident that their efforts will pay off. They must depend on the beneficence of various political processes that include a host of participants other than parents, and on their own ability to bargain for funds from their local superiors. For private schools, resources are not necessarily easier to acquire. To the contrary, competition with other schools, coupled with parental demands for excellence, may make resources harder to acquire. But the resource problem is a simpler one, with a clear connection between school success in accomplishing goals and school rewards from the environment. "Perform or perish" brings considerable certitude to the relationship between private schools and their environments.

Of course, the effects of these basic differences--in governance, administration, and finance--on school organization and performance may be diminished by aspects of high school education that the sectors have in common. Professional norms such as teacher autonomy may minimize sectoral differences in the classroom. Administrative systems outside of schools may be sufficiently complex in both sectors that their differences are less important than their similarities. And, parental influence over schools, if it is exercised mainly through direct involvement, may not differ between the sectors at all. Because of these and other complications, it is difficult to construct a thoroughgoing theory of the school environment--one that permits deductions about the gamut of environmental influences and organizational consequences. But those complications do not vitiate

an empirical comparison of the environments and organizational characteristics of schools in two sectors that fundamental considerations suggest are radically different. Indeed it makes a hard look at the data all the more necessary--and interesting.

Schools and Their Immediate Authorities

Although public and private schools are controlled by their environments in fundamentally different ways, schools of both types are almost invariably subject to immediate outside authorities. Few private high schools, of any size, are completely without governing structures and entirely in control of their organizations and operations. A principal or a headmaster is rarely the only intermediary between the school and its parents. Private schools are at least subject to the decisions of boards of directors, and in most cases are parts of administrative systems, which are sometimes very large. Public schools, even in small systems with only one high school, are immediately responsible to a school board and almost invariably to a superintendent and district office. Because the public system of authority is imposed and the private system is chosen, they will differ, as we have argued, in important respects. Yet notwithstanding these differences, it is far from clear how schools in the two sectors will compare in their relationships with their immediate authorities. Do Catholic and other private school principals and headmasters have more influence than public principals over important decisions about the organization and operation of their schools? Or do they have less? Are non-public superiors less constraining and more cooperative than public superiors, or is it the

other way around? Are private school systems comparatively centralized to ensure that demanding parents are satisfied (and their tuition keeps flowing), or are the public systems more centralized to ensure that their multiple sovereigns are satisfied? We simply do not know; the data necessary to answer these questions have never before been collected. This is unfortunate not only because these questions are important parts of the larger question of school performance, but because they lack intuitive or theoretically straightforward answers.

In the Administrator and Teacher survey we addressed these questions by trying to measure those dimensions of the relationship between the school and its authorities that promised to have the greatest impact on school performance. On the assumption that a school's control over major elements of its organization and operation is likely to be a key determinant of its ability to satisfy outisde demands, we looked most extensively at patterns of influence. In other words, who has more influence over basic matters of policy and personnel: the school principal or the school's authorities? We asked specifically about the influence of the school principal or headmaster, the central office, the school board or governing board, and the superintendent over the following policies or practices: curriculum, instructional methods, disciplinary policy, hiring new teachers, and dismissing or transferring teachers. (The wording of these items and all other items used in this analysis is provided in Appendix B.) To make a useful comparison between public schools, which are usually subject to all of the authorities about which we asked, and private schools, which are not, we focus here on the one authority outside of each school that is regarded as most influential. That is, how

influential is the most powerful authority in each school's environment, and how does this influence vary across issues and sectors?

The answer (see Table 1) is almost shocking in its consistency. In each of the private sectors--Catholic, other private, and elite private--and for every policy and practice, the strongest outside authority is less influential than in the public sector. The strongest authority is also weaker relative to the influence of the principal in the private sector than in the public. Despite the realtively small number of schools in the Catholic and other private subsamples, most of the differences are statistically significant.[1] Assessed by principals on six-point scales, the median difference in the influence of outside authorities is more than a full point between the public and private sectors. The differences, in other words, are more than consistent; they are substantial.

Two regular variations that occur within this general pattern are worth noting, however. The first is that the differences between the private sectors and the public are much larger on matters of personnel than on matters pertaining to educational content and practice. The differences between public and private are twice as large for hiring and firing as they are for the other issues. Outside authorities are reported to have a great deal more influence over the staffing of public schools than of privates, and principals, relative to outsiders, a great deal less. The importance of this difference will become apparent when relations between principals and their staffs are considered.

The other regular variation, which will be repeated regularly in this analysis, is the unsuspected strength of the Catholic schools relative to their environments. Outsiders are weaker among Catholic schools than among the other private schools (and similar in weakness among the elite privates). It would have been reasonable to surmise that Catholic schools, because they are often part of large systems, and are run as appendages of a church that is hierarchical in its own governance, would be every bit as influenced from the outside as public schools. Surely, Catholic schools would not be expected to be freer of outside influence than other private schools. Yet, that is what the survey plainly shows.

The results are lent added credibility by two other indicators of the relationship between the school and its outside authorities. Schools want more from their relationship with their authorities than influence over those elements of school organization and operation that affect their ability to accomplish their goals. Once policy and structure are established, and influence exericised, they want a relationship with their authorities that is not excessively constrained by rules, norms, and standard operating procedures; they want flexibility. They also want to avoid conflict; cooperative authorities can obviously ease the day-to-day difficulties of operating a modern high school. Unfortunately, constraint and conflict often go hand-in-hand with hierarchy (e.g., Downs, 1965). Schools that are imbedded in large systems may find their relationships with their superiors relatively constrained and conflictual. Generally we would expect the public schools to experience these problems more than the private schools. And indeed, that is what we found (see Table 1) for other

private schools and elite private schools. The differences are not huge and they are just shy of statistical significance, but they are consistent and in the right direction. The same is not true, however, for the Catholic schools. There is no appreciable difference between the constraint they experience and that experienced by the public schools; the cooperativeness of Catholic authorities may even be a bit less. Catholic schools, in other words, are acknowledging that they too are subject, as is often suspected, to a substantial hierarchy. Yet despite the hierarchy, Catholic schools differ from public schools in a crucial respect. They, like all private schools, enjoy more influence over their organizations and operations than public schools. Outside authorities in the public sector exert more control over their schools than outside authorities in the private sector do over theirs.

The Parental Environment

The parents of public and private school children are likely to exhibit important differences. All things being equal--and this is a strong condition--parents who send their children to private school attach a greater value to education (broadly defined) than parents who send their children to public school. If two families with the same income, living in the same neighborhood, paying the same taxes, and raising the same number of equally talented children choose different high schools--one public, the other private--for their children, it is presumably because the family which selects the private alternative places a higher value on education than the other. This differnce is likely to be experienced by students in a variety of ways at home. Private school parents will probably hold higher expectations for their

children's achievement, pay closer attention to their academic progress, and generally provide greater encouragement for learning than public school parents.[2] The parents in the ATS schools indeed differ in these respects: parental expectations and parental monitoring of student work are substantially and significantly higher (see Table 2) in all of the private sectors than in the public. We must caution that these differences do not reflect controls for a host of important parental background characteristics that would paritally account for them. But this analysis is not attempting to disentangle the effects of parental background, school quality, and school sector on student performance. It is attempting to describe precisely how the sectors differ. And, a big difference lies with the parents: they expect more from their children and they monitor them more closely.

These differences in parental relations with children follow logically from the parental choice of public or private education. But what differences are implied for parental relationships with the school? Will private parents be more involved in the school or less? More cooperative with the school or less? A simple answer is not logically implied. Private parents are more likely than public parents to be in a school's environment by choice--because they prefer it to the alternatives, and relatively speaking, because they like it. Private school parents are also, to some degree, chosen by the school. Private schools explicitly control their student populations, and are free to exclude students whose parents are difficult or otherwise undesirable. Private parents should therefore tend to have more favorable attitudes toward the school than public parents.

However, this does not ensure benign parental environments in the private sector. Private parents have a mechanism of control over the school, not practically available to public parents, that makes their relationship with the school unpredictable. That is, private parents are free to leave the school, to "exit," in Hirschman's (1970) famous terms, if they do not like what the school is doing. Private parents do not need to coooperate with the school, and they do not need to get deeply involved in the school, to strenuously exercise their "voice," in order to change things to which they object. Public parents are in a different position. Short of moving to a new town, public school parents have no options, other than getting involved, and ultimately, cooperating. Private school parents are compelled to do neither: they can just leave.[3] Public school parents may therefore be more involved and even more cooperative than their friendlier private counterparts.

How do these considerations add up in the ATS schools? Decisively and consistently in one direction. Private schools have more favorable parental environments. Parents are much more involved (see Table 2) in Catholic, other private, and elite private schools than in public schools, and they are more cooperative. Although high involvement, as well as high parental expectations, have negative effects on the overall cooperativeness of the parental environment, all of the classes of private schools have significantly more cooperative relations with parents than public schools--even when those detriments to cooperativeness are controlled. Private schools, in other words, have the better of both worlds: their parents participate more in the school, and on balance, are more supportive.

These are not, however, the only important differences. Public schools, also have less freedom in choosing how to respond to their more difficult environments. Public schools are more constrained by formal rules and informal norms in their relationships with parents than are private schools (see Table 2). Public school parents are more likely to be required to express their complaints through formal channels, both inside and outside of the school, while principals and teachers are more likely to be limited in the remedies they may grant to parents with reasonable grievances, and in the sanctions they may impose against parents with unreasonable ones. Public schools, then, have less flexibility to cope with more difficult parental environments than private schools have to cope with less difficult ones.

This is not, of course, a characteristic of public school authority that is confined to issues of parental relations. As we showed above, the systems of authority controlling public schools exercise more influence than their private counterparts across a range of issues basic to the school's organization and operation. From the school's perspective the public environment is indeed a very different one from the private environment. In a word, it is more centralized.

Public versus Private Principals

If schools are products of their environments, the effects of the environment on the school may be most pronounced in the principal's office. The principal is the focal point of contacts between the various components of the environment and the many elements of the school organization. The principal takes the full force of the environment--its excessive demands, its harsh budget constraints--and

tries to buffer the school from it--to implement its policies, follow its rules, and live within its financial limits in a way least disruptive to the smooth functioning of the school. But the principal cannot block out the environment's influence entirely. The principal's job depends on his ability to satisfy at least the immediate authorities in that environment. Principals should therefore show the marks of their environments, and the differences in those environments, clearly.

It is important to recognize that to the degree this is true, the implications for school effectiveness may be profound. Studies of effective schools increasingly point to the key role of the principal in enhancing school performance (e.g., Brookover, et al, 1979; Blumberg and Greenfield, 1980; Persell, 1982). Excellence in education appears to demand a principal who articulates clear goals, holds high expectations, exercises strong instructional leadership, steers clear of administrative burdens, and effectively extracts resources from the environment. However, the school environment can have a lot to say about whether the principal is able to practice these precepts of effective leadership. The quality of leadership in a school does not inhere in the individual filling the role. It is contingent on the demands, constraints, and resources coming from the environment (not to mention the conditions percolating within the school itself). Depending on the nature and strength of environmental effects on the school, the principal may have only a marginal effect on school performance. Effective schools may indeed be led by strong principals, but their strength may derive substantially from their environment.

Existing research indicates that principals may, in fact, be heavily influenced by their environments. An excellent ethnographic study of 16 principals (Morris, Crowson, Porter-Gehrie, and Hurwitz, 1984) found that public principals are forced by incessant, and often minor, demands to divide their time among hundreds of brief interactions each week, to develop skills more commonly found among politicians, and to eschew important leadership functions such as guiding curriculum and instruction. Other studies (e.g., Bridges, 1970) have gone so far as to characterize the principal as the "captive" of his or her environment. In truth, however, the nature and strength of the environment's effect on the principal is not well established. With one notably atheoretical exception (Salley, et al, 1979), large-scale studies of public school principals and their environments are virtually non-existent. The same is true of research on private school principals (Greenfield, 1982). All that we know about principals is based on limited, though intensive, case studies, and most of what we understand about outside influence on principals is exceedingly general.

The public and private principals in the large sample of ATS schools may relieve some of our ignorance because they do in fact differ substantially (see Table 3). Consider first how they came to their jobs. Private school principals have significantly more teaching experience than public principals--nearly four years in Catholic schools and more than five years in other and elite private schools. This difference is consistent with the frequent occurence of career ladders in public school administration that provide opportunities early in the tenures of public school teachers to move into a host of

subordinate administrative positions, such as assistant principalships, and begin the climb to the top. It is not, moreover, an artifact of the larger schools, and consequently greater administrative needs, in the public sector. The differences in principal teaching experience take into account the number of students and the number of grades in the school. Whatever its origin, however, this difference may well have implications for the relative rapport between principal and teachers, the principal's perception of his role, and other aspects of the job pertaining to the tasks of teaching.

Public and private principals also come to their jobs with somewhat different motives. True, the major motivation of the average principal in each sector is to "take on the challenges of being the principal." But beyond that, their motivations differ.[4] All private principals are likely to give a higher rating to "control over school policies" than public principals as a reason for accepting the position. Public principals are significantly more likely to be motivated by a "preference for administrative responsibilities," and a "desire to further (their) career." Public school principals are, in a similar vein, significantly more interested in moving "up to a higher administrative post." Overall, the differences in career orientations are plain. Public school principals disembark from teaching relatively early, get on an adminsitrative track, and take the job of principal to keep the train rolling. Private school principals are scarcely on a track at all. They stay in teaching longer, and when they take control of a school, it is to influence matters of substance.

These differences, we must caution, are not matters of day and night. Private school principals also have a strong taste for

administration, and public school principals are not far behind in their concerns over school policy. But the differences are real and they are consistent. They are also in line with the differences in public and private environments seen earlier. Public systems exercise more control from outside the school, and give principals more reason to steer their careers toward the outside too.

Similar differences characterize the leadership of principals once they are on the job. Public school principals are more prone to see their role as that of an "efficient and effective manager" and as a "representative of parents, leaders, and sponsors" than are private school principals. In contrast, private principals, more than public, see their roles fitting the alternatives to these: namely, "leading the school in new educational directions," and "selecting and directing school policy according to (their) best professional judgement." These differences are not all large, and the probability that they are zero is not trivial. Yet, for all three private sectors and for both pairs of role alternatives, the private principals differ regularly from the public. Moreover, the difference is in the expected direction. Public school principals, operating in more complex administrative environments and facing the more numerous demands of legitimately entitled participants, are more likely to take on the roles of manager and representative. Private school principals have greater freedom to pursue the roles of leader and trustee, and to direct their schools according to their best professional judgements.

School performance may well be influenced by these role perceptions and career motivations because they seem to go hand-in-hand with the principal's leadership practices. Teachers in the ATS schools

were asked about a number of aspects of the principal's leadership (see Appendix B), the responses to which were strongly related to one another. Together they provide a reliable measure of perceived leadership. In each of the private sectors, principals were rated as all-around better leaders than public principals. There is no doubt about the statistical significance of these differences, and like all of the organizational differences explored in this analysis, they take into account school size and complexity, factors that do make the task of leadership more difficult. To the extent that leadership can be measured by factors such as knowledgeability, communication skills, clarity of purpose, and willingness to innovate, private school principals are regarded as stronger leaders by their staffs than are public principals.

But how might these differences concretely affect school performance? A prominent possibility is if they spill over into the one area of leadership that is mostly widely regarded to affect school performance, that is, instructional leadership. Do public and private principals differ in the quality and quantity of assistance that they provide teachers with their instructional problems? The answer is a resounding yes. Private principals, irrespective of school size and complexity, are more helpful to teachers than their public counterparts. In this crucial area of the job, as in so many others, public and private principals display basic differences that parallel the differences in the environment. While these differences may well have other causes--perhaps the quality of students--the tilt of the public principalship toward administration and politics, and of the

private principalship toward leadership and professionalism, are more than environmental coincidents. They are what we should expect.

The Structure of the School

Principals work the borders between schools and their environments, and consequently wear the most visible scars of the border wars and skirmishes they are forced to fight. But just across the border, the school's terrain is also marked by battle. It is carved up by policies, rules, and procedures negotiated with or imposed by the environment, regardless of how effectively the principal guards the border. Those policies, rules, and procedures constitute the school's structure and establish the boundaries within which the school must perform. Perhaps above all else that goes into the educational process--instructional methods, the content of courses, and even the staffing of the school--the environment wants to control school structure. Establish the goals, specify the product, constrain the process, and provide the resources--if the environment can do these things, it can afford to eschew the trying task of monitoring the school's daily operation.

So how are public and private schools structured, and does the architecture reflect the work of their different environments? First, public and private schools pursue distinctly different sets of goals. Public schools (see Table 4) place significantly greater emphasis than private schools on basic literacy, citizenship, good work habits, and specific occupational skills. Private schools are significantly more likely to favor academic excellence, personal growth and fulfillment (e.g., self-esteem), and human relations skills such as the

appreciation of other cultures. From an environmental standpoint these differences are not surprising, except in their strength and clarity. We are, after all, looking at three very different types of private schools, most of which would not ordinarily be labeled "elite," and at a cross-section of public schools that includes many of the highest quality. Yet virtually without exception the three private sectors rank one set of goals significantly higher than public schools, and the other significantly lower.

Public schools, it seems clear, are pursuing a package of goals naturally suited to a system of universal education. They are obligated to educate everyone, are subject to legitimate parental and political pressures if they fail, and have chosen a set of goals to ensure broad satisfaction. Everyone should leave school literate and capable of participating in the political system of which the public school is a part. If everyone has not acquired the skill or motivation to pursue education beyond high school, he or she will at least graduate with the work habits and perhaps even the specific skills to move smoothly into the labor force. This is not to say that this is the best educational strategy for public schools; they might achieve a higher level of public satisfaction if they pursued the less patently utilitarian goals pursued by private schools. But the choice of objectives that represent lowest common denominators for the public school clientele is an understandable choice given the environment public schools must serve. Private schools, having the freedom to choose their environments, are able to select a set of goals, and promise a type of education, for which there is a market. In their

collective view, that market is one that values intellectual achievement and emotional development.

These differences, it is important to note, reflect only the views of school principals. As such, they alone tell us more about the effect of the environment on the principal's priorities for the school than upon the school's structure per se. Whether the differences in school goals emanating from the principals' office become manifest in school structure, and ultimately performance, depends on whether those goals are upheld by specific policies and are appreciated by the staff.

The policies of public and private schools (see Table 4) seem to do just that. Catholic schools, other private schools, and elite private schools all have more stringent minimum graduation requirements. Private school students, regardless of track, must take significantly more English and history, science and math, and foreign language in order to graduate from high school than public school students. In science, math, and foreign language the differences range up to two years. Private schools are simply less likely than public schools to provide an easy way out for any student. Private schools are also less likely to permit students to go without homework. Other private and elite private schools are especially tough in this regard. Over half of these schools establish schoolwide daily minimums per subject, strongly encourage homework, or, in cases where faculty are overzealous, set daily maximums per subject. In contrast, ninety percent of all public schools leave the amount of homework entirely up to teachers. Catholic schools fall in between these extremes, with the majority giving teachers discretion but with twice the public proportion having a schoolwide policy. In short, the private and

public sectors follow through with specific policies consistent with their disparate goals, the former geared for academic excellence, the latter for something less.

The remaining question is whether these differences in basic purpose are appreciated by the staff. Interestingly, they are to very differing degrees in the two broad sectors. Teachers in all three types of private schools say that the goals of their schools are clearer and more clearly communicated by the principal ("goal clarity" in Table 4) than teachers in public schools report. In addition, private teachers are more in agreement among themselves about these matters. Private teachers, in other words, are more likely to understand that the aims of their schools tend toward academic excellence and personal growth than public teachers are to grasp that the objectives of their schools emphasize the basics and practical skills. This difference is not confined, moreover, to the professional staff nor to the lofty level of school goals. Students experience it, for example, in dealing with school disciplinary policies. From the perspective of students, disciplinary policies are more ambiguous in public schools than in private: public students are less likely to know what comprises school policy than private students. In light of this difference, it is not surprising to find that public school students regard their policies as less fair and effective too.

Public and private schools, then, not only have different goals and policies, but different degrees of goal and policy clarity. The latter of these general differences, especially, is likely to have important consequences for school performance. The fact that public and private schools pursue different sets of goals is in some

respects less important to school performance. It may well be that the average type of student in public schools progresses more rapidly in an educational program that focuses sharply on the basics and on practical skills. Goals that establish falsely high expectations may be less effective. It may also be more sensible to evaluate school performance against the goals schools set for themselves (Bryk, 1981) than goals, such as academic achievement, that analysts wish to impose. Public and private schools may be equally efficient or effective--at achieving different things. But there is no getting around the problem that unclear goals may cause for school performance. Organizations that disagree about basic purposes are simply less likely than organizations that agree to achieve the goals that leadership establishes. There is nothing intrinsic about the number or type of goals pursued in public schools that places them at a disadvantage relative to private schools. The goals pursued in public schools are no less consistent nor inherently ambiguous. But the difference in goal clarity between the sectors may still be intrinsic. It may be a product of the more complex and demanding environments in which public schools inevitably operate, environments that lack the mechanism or incentives to provide schools with a clear and consistent set of demands.

Unfortunately, they are also environments that may fail to provide sufficient resources to satisfy those demands. In public schools, teachers complain about the availability of essential instructional materials and supplies (Table 4). This is just as true in comparison to Catholic schools, where per pupil expenditures are lower that public schools, as it is in other private schools where per pupil expenditures are higher.[5] It is well beyond the scope of this analysis to estimate

whether the resource shortages experienced by public teachers are due to public school inefficiency, environmental stinginess, or something else. But that does not diminish the importance of noting an additional component of emerging organizational syndromes in public and private education in which schools closely mirror their environments.

School Personnel

The syndromes only enlarge when we compare the personnel systems of public and private schools. They too differ in basic respects. Of course, these differences might be expected given the general characteristics of public and private enterprise in this country. Public agencies, such as schools, are largely staffed by personnel whose hiring, firing, promotions, salaries, fringe benefits, grievance procedures, and the like are governed by public personnel systems (sometimes public unions) not realistically within the agency's realm of choice or influence. Private enterprises, despite the prospect or existence of unions, are usually less encumbered in these respects. Still, the differences that we find are less intuitive than analogies with other agencies and enterprises might suggest.

Whether a school is publicly controlled or privately owned, it is not free of outside authority. The size and complexity of that authority may vary--from a large bureaucracy in an urban public or parochial school system to a solitary governing board for a small private school--but the leaders of few schools are formally their own sovereigns. Outside authorities are concerned about the performance of their schools and seek to influence or control them. The most

important ways that they do this are by establishing the school's structure--its policies and procedures--and by controlling its staff, by deciding who is hired and who is fired. There is no logical reason why the authorities outside of private schools would be any less interested in exercising this basic form of control than the authorities outside of public schools. At the school level there are no inherent characteristics of public and private enterprise that provide private schools more control over personnel than public. Yet, that is what we find.

We asked principals to evaluate an assortment of potential barriers to hiring excellent teachers. On a number of obstacles, including important ones such as applicant shortages and low pay, principals in the public and private sectors agreed on their severity. But on two (see Table 5) they disagreed across the board. Public school principals regard "central office control" and "excessive transfers from other schools" as larger barriers to hiring excellent teachers than the principals in any of the private sectors. In contrast, not one barrier was rated higher by private schools than public schools. Interestingly, the differences in barriers are greatest between the public and the Catholic schools, where outside hierarchy is often found. Taken alone these differences do not point to vastly different hiring systems. But viewed in conjunction with the influence of outside authorities over hiring that was discovered earlier, and the influence of teachers that will be discussed below, public and private methods of hiring are clearly distinguished by their degrees of centralization--the public more so and the private somewhat less.

The distinction positively crystallizes when the other side of the personnel system is considered. Public school principals face substantially greater obstacles in dismissing a teacher for poor performance than private school principals. The procedures are far more complex, the tenure rules more constraining, and the preparation and documentation process roughly three times as long (Table 5). The complexity and formality of dismissal procedures is the highest barrier to firing cited by public school principals. For private school principals, of every type, the highest barrier is "a personal reluctance to fire." These responses provide a rather poignant statement of the differences between the sectors: while the public school principal is bound most by red tape, the private school principal is bound most by his conscience.

Principals do, of course, have other forms of control over their staffs. They can encourage undesirable staff to resign, retire, or transfer. They can offer good teachers special assignments or relieve them of onerous duties. They can recognize high performance with awards.[6] But none of these practices differs systematically across the sectors. Public principals are without formal tools to compensate for the centralized and administratively complex systems of hiring and firing in which they must work.

It may be no coincidence, then, that public schools have, by some measures, less desirable teachers than private schools. Based on principal evaluations of teachers, we estimate that private schools, depending on sector, have anywhere from 7 percent to 25 percent more excellent teachers than public schools (Table 5). Public school principals also face a much more serious problem of teacher

absenteeism: attendance rates are poorer, more substitutes are required, and principals are more likely to complain about the situation. Of course, these differences in teacher quality may have explanations other than the personnel system--but not obvious ones. For example, excellent teachers are not attracted to private schools for the financial rewards. The lowest annual salaries in Catholic schools, we estimate, are nearly $1800.00 below those in public schools, and the lowest in other private schools more than $1500.00 below those in private. Similar differences hold at the upper end: Catholic teachers peak more than $4300.00 below public, and other private teachers $900.00 below. Only in elite private schools, where pay is higher than in public, is financial reward a promising explanation of higher quality teachers. In the other schools, the different locus of control over hiring and firing must be a leading candidate to account for sectoral variation in teacher quality.

Whatever their effects on teacher quality, however, it is important to understand why personnel systems differ in their loci of control--why public systems are more centralized and private more decentralized. The answer lies mainly in two closely related developments in the public sector that have not progressed as far in the private sector. The first is the tenure system, and the second is unionization.

Tenure systems in public schools are special cases of the employee protection--or civil service--systems that exist at all levels of American government. In general, these systems exist to protect employees of public agencies from the vicissitudes of politics and the temptation of newly elected officials to reward hundreds or even

thousands of loyal supporters with jobs in public agencies. Patronage systems, as the alternative to civil service systems are known, discourage the best people from pursuing public sector careers and undermine the professionalism of public agencies. To correct these problems, reform movements in the late 1800s from the local level to the national, but especially at the local, pushed to replace patronage with non-partisan, impartial systems of hiring and firing. The tenure system in the public schools is justified by a similar logic, and owes its origin to many of the same political forces (Peterson, 1985). Since the turn of the century, tenure systems have spread widely in public education. They have also become more elaborate in their protections. The latter development, however, is not a product of progressivism or broad interest in the depoliticization of the public service. Rather, it is a response to the assorted efforts of teacher associations and unions ranging from legislative lobbying to collective bargaining to provide teachers with tenure rules and labor contracts that more thoroughly protect their members from dismissal.

Tenure rules and labor contracts are not limited, of course, to public employment. At the college and university level private schools follow tenure rules in much the same way as public schools. And, in private employment generally labor contracts and unionization are not uncommon. To be sure, the private sector lacks powerful anti-patronage incentives to develop extensive systems of employee protection. Nevertheless, it is not clear that huge disparities in tenure and unionization should characterize public and private secondary education. That, however, is what we found (see Table 5).

Significantly and substantially more public schools than private schools offer tenure or its equivalent. While 88 percent[7] of all public schools offer tenure, the percentage is far less in private schools, even considering differences in school size and complexity: 62 percent less in Catholic schools, 71 percent less in other private, and 49 percent less in elite privates. Among schools that do offer tenure, the proportion of teachers enjoying it is also significantly different. Nearly 80 percent hold tenure in public schools, but the figure is 10 to 16 percent lower in the three private sectors. The differences in unionization are even wider. Public schools are unionized in roughly 80 percent of all cases, but even allowing for school size and complexity, Catholic schools in only 10 percent, and other private and elite private practically never.

These disparities in the development of tenure protections and organized representation go a long way toward accounting for the differing degrees of centralization in public and private personnel systems. In public systems where tenure is provided, protections are usually guaranteed through laws that are written by democratic authorities--school boards or state legislatures. Teachers are protected, in other words, by authority residing outside the school. If important parts of a teacher's insurance package against dismissal are contained in a union contract, additional outside authority is imposed on the school. To the extent that these constraints exist, less control over personnel matters can be delegated to the school level--even if central offices and superintendents want control to rest at that level. Tenure rules and union contracts settle the issue of

where and how personnel decisions--especially regarding termination or transfer--will be made. They will be centralized.

To the extent that private schools have tenure systems and union contracts, their principals may be similarly constrained. Their rules derive from the authority of governing boards, church authorities, or some source outside the school. But the private sector is substantially free of these constraints: they are found infrequently, and when they are, they provide fewer teachers with long-term protection. Private schools and their outside authorities are therefore freer to decide how and where major personnel decisions will be made. When measured against the public schools, that decision favors decentralization. Private schools and private principals have greater control over the staffs that comprise their organizations and teach their students than their public counterparts. And that, as we shall see, is reflected in the staff relationships from the top to bottom of these very different systems of education.

Staff Relations

It should now be clear that the fundamental organizational difference between public and private systems of education is the greater freedom that private schools are provided by their environments in structuring and operating their institutions. Outside authorities are less influential, parents are more cooperative, decision-making about policy and personnel is more decentralized, and leadership is more professional and independent. Yet, it is not altogether clear how the fundamental difference reverberates through the organization. Goals are clearer, policies are less ambiguous, resources are less of a

problem, and teachers may be of a higher caliber. But these dimensions provide an incomplete picture of how the organization functions. They do not tell us how decisions are made internally, how much influence or control teachers have over their teaching, or how teachers get along with each other. They do not tell us what the private school does with the greater freedom and discretion that its environment grants--whether it concentrates it in the office of the principal or whether it passes it down to the staff. It remains to be seen, in other words, if private schools strive for academic excellence and high performance by operating according to a more authoritarian model of organization or a more democratic one.

The answer may surprise, for despite the reputations that private schools have for rigid curricula, traditional instructional methods, strong principals, and in general, centralization, the opinions of the staff suggest nothing of the kind (see Table 6). Private schools consistently manifest fewer of the consequences of hierarchy than public schools. The teachers in private schools are significantly more likely than those in public schools to regard their principals as encouraging, supportive, and reinforcing. They feel more influential over school-wide policies governing student behavior, teacher in-service programs, the grouping of students of differing abilities, and school curriculum. Within their classrooms, private teachers believe they have more control over text selection, course content, teaching techniques, disciplining students, and in the Catholic schools, determining the amount of homework to be assigned. (The non-Catholic private teachers feel constrained by the school-wide homework policies identified earlier.) Even on the matters of teacher hiring and firing,

private school teachers appear more influential than public. Virtually all of these differences are significant, and except for the issue of homework, the direction of the relationships is consistent across all three sectors for all issues. Relative to public schools, private schools appear to delegate significant discretion to their teachers, and to involve them sufficiently in school level policy decisions to make them feel efficacious. Private schools also do a significantly better job of relieving teachers of routine and paperwork--two other indicators of hierarchy and formality.

The relative freedom that private teachers have to control their work, and the support and reinforcement--as opposed to supervision and evaluation--that they receive from their principals in exercising this freedom are reflected in the relationships among the teachers themselves. Private school teachers are more likely to know what their colleagues are teaching, and to coordinate the content of their courses. They spend more time than public school teachers meeting to discuss curriculum and students, and more time observing each other's classes. Finally, they have a higher level of collegiality. Private teachers, to put it in the plain terms of the survey, are more likely to believe that they "can count on most staff members to help out anywhere, anytime--even though it may not be part of their official assignment," and ultimately that the "school seems like a big family." All of these differences are large and statistically significant, but their full significance may be much greater. These elements of teacher relations are prominent elements of most explanations of effective schools. While it is well beyond the scope and purpose of this analysis to estimate their effects on students and learning, it

requires little faith to believe that these variables may provide the beginnings of a systematic and testable organizational explanation of school performance.

Within the scope of this analysis, however, is the question of why public and private schools feature such distinctive internal organizational relationships. Why do private schools seem to delegate more discretion to teachers, involve them more in decisions as important and sensitive as the hiring and firing of their colleagues, and support, more than supervise, their activities? The answer, we suspect, lies where it has throughout this analysis: in the school environment. Public school systems leave fewer substantive issues for their schools to decide, and provide them with staffs that their leaders have had less influence in selecting, and have less ability to control. Public school principals are therefore less willing to invest in them the trust that private principals are willing to invest in theirs. With less to decide and a less trustworthy staff to involve, public prinicpals are more likely than private principals to centralize.

This is not to say, however, that private schools tend to be internally democratic or that teachers decidedly direct school policy. While it seems certain that private teachers have more discretion and control over particular aspects of classroom instruction, they may not be truly influential over school policy. It is more likely that what we are observing in private schols is an almost organic organization at work. The leaders are able to staff the school the way that they wish. It is safe, therfore, for them to involve teachers integrally in decisionmaking processes. The teachers support policies that are

ultimately adopted, and consequently feel efficacious. But the process moves in the direction favored by the school leader because the staff is predisposed in his or her direction. Over time, as internal consensus and harmony become institutionalized, questions of power and centralization become inappropriate. Everyone has influence, yet the school proceeds as if it is strongly led. The environment of the private school affords it the luxury of moving in this direction by giving it significant control over its own fate. The environment of the public school simply does not. The effects of this difference can be seen all the way to the bowels of the bureaucratic organization that the public school almost inevitably is.

Conclusion

Research on schools is currently struggling with two issues of major and controversial proportions: the issue of whether, and by how much, private schools outperform public schools, and the issue of the causes of school effectiveness. Unfortunately, current theories of school behavior have failed to provide sufficient illumination to lead either of these debates to a conclusion. Current theory either focuses a spotlight on individual elements of internal school practice while obscuring the elements around them, or throws a floodlight on the school from that outside that fails to reveal the school's inner workings. We have, as a result, a host of hypotheses about school effectiveness that together amount to nothing more than a list. And, we have general conceptions of schools as open systems that do little to explain variations in school performance. The overarching objective of this analysis has been to show that progress toward a general theory

of school behavior can be made by integrating elements of both of these approaches.

By comparing public and private schools we have tried to show that school environments vary in predictable ways. By understanding these variations within the context of what is essentially an open system model of organization we have tried to show that they have predictable relationships with school structure and operation. By focusing our empirical analysis on elements of school organization that research on effective schools has found to influence school performance, we believe we have identified environmental variations that may ultimately help us understand why schools succeed or fail.

Beneath this overarching objective is a more specific but equally important one: to begin to establish the linkage between the sector in which a school resides and the performance of students educated in that sector. The work of Coleman and his associates on the HSB sample of high schools has provided substantial evidence, however controversial, that Catholic schools outperform other private schools which, in turn, outperform public schools. What this work has not provided is an explanation of that performance. In this analysis we hope that we have demonstrated that we are on the right track toward finding one. Of course, a great deal of work remains to be done. Causal analysis is needed to confirm the linkages between the environment and the organization that our descriptive analysis has only suggested. Student performance must be integrated in the causal analysis too. Nonetheless, the differences between public and private environments and their respective school organizations are so empirically stark, theoretically logical, and perfectly consistent with both research on

effective schools and on sectoral performance, that it hardly requires religious faith to believe that the approach will prove illuminating.

Public schools, relative to private, live in environments that are complex, demanding, powerful, constraining, and uncooperative. As a result, their policies, procedures, and personnel are more likely to be imposed from the outside. Public principals make the best of this environment by blending two roles, the middle manager and the politician. Like the middle manager, he consolidates whatever power is given him and guards the school's few prerogatives against the influence of a staff over which he has inadequate control. In the same role he emphasizes efficient administration as a safe way to please the administrative hierarchy of which he is a part. But the principal must also deal with a more complex and less friendly environment than the private principal--an environment that is politicized by school boards, state politicians, superintendents, local community organizations, and last but not least, parents. To do so, he plays the role of a politician, campaigning for the support of his school from a host of sometimes hostile constituencies.

A striking measure of this political behavior (see Table 7) is the tendency of all principals, public and private alike, to paint a rosier picture of the school than that painted by the staff. On every question asked of both principals and teachers about the internal climate of the school, the principals reported that the climate was better, and in all but one instance the difference between principals and teachers was significant. These differences hold, moreover, after taking the size of the school into account. In other words, principals do not give more favorable responses because they are out of touch with

their schools. But the differences are not uniform across schools. They differ sharply between public and private. Public school principals are much further away from their staffs in their evaluations of the school climate than private principals. Public school principals are more likely to dress up the image of their school than their private counterparts. But of course, this should be expected. It is they, not private principals, who are forced by their environments to play the role of politicians.

Ultimately, the differences between the environments, structures, procedures, and types of leadership in the public and private schools are reflected among their respective staffs. Public principals provide less instructional leadership for teachers and less clear signals about school objectives. They also permit teachers less influence and control over their work. Teachers, for their part, assist each other less with their instruction, and in the end, toil in a less collegial atmosphere.

These are important organizational consequences not only for an understanding of public and private school performance but for an understanding of school effectiveness more generally. These aspects of the relationships between principals and teachers, and between teachers and their colleagues, bear directly on the educational process in the school, and are widely acknowledged to influence school performance. To the extent that public and private schools differ in these critical areas because they exist in different environments, we have the basis for an explanation of public and private school performance. To the extent that these characteristics of school effectiveness also vary, regardless of sector, with the complexity,

constraint, control, and cooperativeness of the school environment, we have a foundation for understanding much more--the effective organization of American schools.

NOTES

1. Throughout this paper coefficients will be called statistically significant or simply significant if they satisfy a two-tailed t-test at a probability level of 0.05. The test is of limited use, however, in evaluating the "elite private" coefficients. Only 9 elite schools are included in the sample, and after weighting, they number next to zero. Their t-scores are therefore uniformly low. In any case, statistical inferences from these elite schools to a larger population are inappropriate because the elite schools were sampled with certainty (see Appendix A).

2. Recognizing this is not to say, however, that private parents exert unmeasurable influences on student achievement that make impossible the estimation of private school effects--something we plan to examine in subsequent analyses.

3. Private parents are not free from constraints in exercising their option to exit. Switching schools creates adjustment problems for children, and parents must take this into account. Nonetheless, it is less costly for private parents to switch schools than public.

4. Besides the top-ranked motivation of "taking on the challenge," other motivations that hold the same priorities for principals in different sectors include: "control over curriculum," and "control over personnel." Another motive, "assignment by superiors" ranks higher, on average, in the private sector. However, sharply bimodal distributions undermine general interpretations about private sector principals on this score.

5. This is based on data provided by only three-fourths of the sample to question S8053A in the original HSB data set that asked for district level expenditures per student. By this measure public expenditures were $1610 per pupil, Catholic expenditures, $1489, other private expenditures, $1850, and elite private, $1919.

6. Private schools may also offer merit pay; however, only the other private sector makes significantly greater use of it. Catholic schools do not differ from publics in providing merit pay.

7. Because of the way the HSB survey was drawn, this percentage, and all others that refer to proportions of schools in the population, should be interpreted as proportions of students attending schools with a given characteristic. In the public and Catholic sectors, however, these proportions should be close to the proportions of schools as well.

Table 1. The Relationships of Outside Authorities with Schools[1]

	Catholic		Other Private		Elite Private	
Absolute Influence						
Curriculum	-0.80	(-3.18)	-0.61	(-2.97)	-0.72	(-0.28)
Instruction	-0.75	(-2.43)	-0.10	(-0.39)	-0.71	(-0.22)
Discipline	-1.15	(-4.74)	-0.25	(-1.27)	-1.66	(-0.67)
Hiring	-2.15	(-9.23)	-0.92	(-4.86)	-2.84	(-1.18)
Firing	-2.01	(-9.92)	-1.36	(-8.26)	-2.34	(-1.13)
Influence vs. Principal						
Curriculum	-1.06	(-3.67)	-0.57	(-2.41)	-0.43	(-0.14)
Instruction	-0.68	(-2.45)	0.46	(2.03)	-0.59	(-0.21)
Discipline	-1.19	(-3.97)	-0.003	(-0.01)	-1.92	(0.62)
Hiring	-2.81	(-8.06)	-1.07	(-3.76)	-3.53	(-0.98)
Firing	-2.41	(-8.97)	-1.27	(5.82)	-2.76	(-1.00)
Freedom from Constraint	0.23	(0.80)	0.35	(1.52)	0.66	(0.23)
Cooperativeness	-0.09	(0.34)	0.36	(1.70)	0.91	(0.34)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

Table 2. Parental Relationships with School[1]

	Catholic		Other Private		Elite Private	
Monitoring Students	0.58	(5.03)	0.24	(2.61)	0.79	(0.72)
Expectations of Students	1.30	(8.43)	1.16	(9.60)	2.54	(1.74)
Involvement in School	0.47	(3.85)	0.20	(2.08)	0.39	(0.33)
Cooperativeness	0.35	(2.23)	0.18	(1.36)	0.38	(0.23)
Cooperativeness, Controlled[2]	0.55	(3.21)	0.34	(2.46)	0.78	(0.48)
Freedom from Constraint	0.53	(2.72)	0.36	(2.26)	0.66	(0.33)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

[2] Additional controls include parental involvement (B=-.07, t=-.91) and parental expectations (B=-.23, t=-3.62)

Table 3. Principal Characteristics[1]

	Catholic		Other Private		Elite Private	
Teaching Experience	3.76	(2.19)	5.31	(3.92)	5.30	(0.32)
Motivations						
Control Policy	-0.65	(-1.89)	-0.68	(-2.44)	-0.48	(-0.14)
Prefer Administration	0.88	(2.44)	1.06	(3.62)	-0.26	(-0.07)
Further Career	1.76	(4.20)	1.21	(3.57)	0.92	(0.21)
Desire Advancement	-0.39	(-3.86)	-0.43	(-5.38)	-0.58	(-0.61)
Role Perception						
Managerial	-0.26	(-2.20)	-0.12	(-1.29)	-0.08	(-0.07)
Representational	-0.11	(-1.08)	-0.08	(-0.99)	-0.05	(-0.05)
Leadership Perceived by Teachers	0.39	(2.24)	0.75	(5.48)	0.60	(0.36)
Instructional Leadership	0.54	(3.87)	0.76	(6.82)	0.65	(0.48)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

Table 4. School Structure[1]

	Catholic		Other Private		Elite Private	
Goals						
Basic Literacy	1.78	(6.62)	0.96	(4.39)	1.59	(0.58)
Citizenship	0.95	(3.24)	1.25	(5.23)	1.09	(0.36)
Good Work Habits	0.81	(2.58)	0.37	(1.44)	0.20	(0.06)
Occupational Skills	0.83	(2.80)	0.71	(2.95)	0.82	(0.27)
Academic Excellence	-0.93	(-2.54)	-1.43	(-4.82)	-1.93	(-0.51)
Personal Growth	-1.70	(-4.78)	-0.76	(-2.63)	-1.22	(-0.33)
Human Relations Skills	-1.23	(-3.41)	-0.45	(-1.54)	0.19	(0.05)
General Graduation Requirements						
English and History	0.49	(2.97)	0.40	(3.07)	0.44	(0.28)
Science and Math	0.31	(1.64)	0.73	(4.90)	1.48	(0.82)
Foreign Language	0.86	(7.33)	1.13	(12.18)	2.25	(2.02)
School-wide Homework Policy	0.11	(1.07)	0.29	(3.57)	0.47	(0.46)
Goal Clarity	0.57	(3.32)	0.94	(6.97)	0.84	(0.52)
Goal Disagreement	-0.15	(-1.36)	-0.46	(-5.26)	-0.32	(-0.30)
Disciplinary Policy						
Ambiguity	-0.25	(-2.39)	-0.12	(-1.46)	-0.41	(-0.41)
Fairness & Effectiveness	0.84	(5.43)	1.01	(8.33)	1.63	(1.11)
Availability of Materials	0.53	(3.14)	0.54	(4.04)	1.30	(0.81)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

Table 5. Personnel Policy and Process[1]

	Catholic		Other Private		Elite Private	
Barriers to Hiring						
Too Many Transfers	-0.62	(-2.60)	-0.35	(-1.80)	-0.16	(-0.06)
Central Office Control	-0.63	(-2.16)	-0.04	(-0.17)	-0.34	(-0.11)
Barriers to Firing						
Complex Procedures	-0.84	(-2.71)	-2.41	(-9.57)	-2.19	(-0.69)
Tenure Rules	-1.75	(-4.83)	-2.44	(-8.29)	-2.78	(-0.75)
Hours to Fire	-21.3	(-3.71)	-17.5	(-3.77)	-21.7	(-0.37)
Percent Excellent Teachers	6.63	(1.76)	16.91	(5.70)	24.59	(0.69)
Teacher Absenteeism	-0.62	(-4.83)	-0.32	(-3.02)	-0.50	(-0.39)
Lowest Teacher Salary	-1761.6	(-3.82)	-1535.2	(-4.22)	1300.6	(0.30)
Highest Teacher Salary	-4368.2	(-3.94)	-928.1	(-1.06)	7507.0	(0.71)
No Tenure Offered	0.62	(9.17)	0.71	(13.4)	0.49	(0.76)
Percent Tenured Teachers	-16.37	(-3.10)	-11.47	(-2.76)	-10.27	(-0.20)
No Union	0.71	(10.03)	0.77	(13.83)	0.76	(1.13)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

Table 6. Staff Relations[1]

	Catholic		Other Private		Elite Private	
Principal-Teacher Relations	0.43	(2.44)	0.64	(4.69)	0.86	(0.52)
Teacher Influence & Control						
Student Behavior Codes	0.64	(4.42)	0.66	(5.61)	0.74	(0.50)
In-Service Programs	0.20	(1.17)	0.80	(5.65)	0.57	(0.32)
Ability Groupings	1.04	(6.72)	1.23	(9.81)	1.34	(0.84)
Curriculum	0.69	(4.86)	1.00	(8.70)	1.13	(0.77)
Text Selection	0.30	(2.94)	0.23	(2.78)	0.23	(0.22)
Topics Taught	0.17	(2.03)	0.27	(4.02)	0.10	(0.12)
Techniques	0.17	(3.39)	0.07	(1.76)	0.25	(0.45)
Discipline	0.56	(6.79)	0.09	(1.40)	0.26	(0.31)
Homework	0.20	(3.08)	-0.12	(-2.39)	-0.39	(-0.59)
Hiring	0.64	(2.27)	0.56	(2.43)	1.36	(0.47)
Firing	0.60	(2.23)	0.19	(0.86)	0.35	(0.13)
Routine & Paperwork Interference	-1.01	(-6.74)	-0.51	(-4.36)	-0.66	(-0.46)
Teacher-Teacher Relations						
Curriculum Coordination	0.46	(2.97)	0.89	(7.27)	1.01	(0.69)
Teaching Improvement	0.64	(3.70)	1.01	(7.45)	1.23	(0.75)
Collegiality	0.69	(5.47)	1.03	(10.41)	0.49	(0.41)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

Table 7. Differences in Principal and Teacher Responses to Common Items[1]

Item	Principal-Teacher Differences	Principal-Teacher Differences by Sector		
		Catholic	Other Private	Elite
Administration's Knowledge	1.11 (16.37)	-0.40 (-1.57)	-0.17 (0.87)	-0.39 (-0.16)
Staff Involvement	1.05 (16.46)	-0.48 (-2.10)	-0.38 (-2.10)	-0.55 (-0.25)
Staff Recognition	1.02 (13.90)	-0.62 (-2.37)	-0.37 (-1.80)	-0.24 (-0.10)
Experimentation Encouragement	0.84 (13.23)	-0.58 (-2.49)	-0.64 (-3.45)	-0.49 (-0.22)
Material Availability	0.66 (9.35)	-0.25 (-1.01)	-0.41 (-2.06)	-0.55 (-0.23)
Staff Cooperation	0.35 (6.75)	-0.24 (-1.24)	-0.07 (-0.45)	-0.03 (-0.01)
Routine Interference	0.34 (4.68)	-0.05 (-0.18)	-0.91 (-4.15)	-0.42 (-0.16)
Teaching Innovation	0.21 (3.51)	-0.32 (-1.46)	-0.48 (-2.76)	0.39 (0.19)
Staff Performance Standards	0.05 (1.01)	-0.02 (-0.12)	0.13 (0.91)	0.15 (0.09)

[1] Table reports unstandardized coefficients and (t-scores) for dummy variable regressions in which the public sector is the baseline and the size of the tenth-grade class and the number of grades in the school are controlled.

APPENDIX A

The Administrator and Teacher Survey (ATS) sample was drawn from the sample of secondary schools selected for the NCES-sponsored longitudinal survey, High School and Beyond (HS&B). The schools in the present study were classified into four sectors. Two of these, "public" and "Catholic," are self-explanatory. The "other private" classification includes a mixture of sectarian (non-Catholic) and secular private schools. "Elite private," or what others have called "high-performance" schools, are not a sample but rather a complete population, including the eleven schools nationwide with the highest proportions of their graduating student bodies listed as semifinalists in the 1978 National Merit Scholarship competition. (In order to get a broad distribution of "elite" schools, it was specified that no two could be from the same state. However, this affected the selection of only one school.) Due to school closures and mergers 975 of the original 1,015 schools were still in existence during the administration of the ATS questionnaire. Because this attrition reflected actual school closures during this period, weighting was not required for the schools that remained.

In drawing the ATS subsample of 532 schools, existing Base Year HS&B Parents Survey schools were included first. The 293 schools in this category were drawn as a systematic probability sample from the 1,015 schools participating in the 1980 survey. This subsample was supplemented with the remaining "non-Hispanic" private schools (n=75), increasing the overrepresentation of this stratum beyond that in HS&B. An additional 164 existing public

"non-Hispanic" schools were selected randomly from among those that remained. To reduce the HS&B overrepresentation of "Hispanic" schools, those not already in the Parents Survey were excluded from the supplement. The final sample was then weighted to correct for over and underrepresentation of various sectors. The weighted sample was employed in all analyses reported in this paper.

Within the schools, questionnaires were administered to the principal or headmaster and random samples of up to 30 teachers. An average of 22.8 teachers per school responded, for an overall response rate of nearly 88 percent. Principals responded at the same high rate (Table A1). Response rates across sectors were not as consistent (Table A2), but we have no reason to believe that the reasons for non-participation differ systematically across the sectors.

Table A1

Receipts by Questionnaire Type

	Schools Mailed to	Schools Responding		Questionnaires Received	
Questionnaire Type	N	N	% of sample	N	% of requested
Teacher	456	455	90%	10,382	87.4%
Principal	456	404	80.3%	404	88.4%

Table A2

Participation by Sample Type

School Type	1	2	3	4	Total
# Sampled	404	69	11	21	505
Questionnaires Returned	368	59	10	19	456
District Refusal	5	0	1	0	6
School Refusal	31	10	0	2	43
Invalid Cases	1	4	1	0	6
Valid N	367	55	9	19	450
% of Valid Total	81.6%	12.2%	2.0%	4.2%	100%
Valid Response Rate	90.8%	79.7%	81.8%	90.5%	

School Types:

1 = Public
2 = Catholic
3 = Elite
4 = Other Private

APPENDIX B

The following items or combinations of items were used to measure the variables reported in the tables. The surveys from which they are taken are abbreviated as follows: ATS Principal Survey (P); ATS Teacher Survey (T); HS&B Sophomore Cohort First Follow-up 1980 (FY,BB); HS&B Schools First Follow-up (SB).

Table 1

Absolute Influence/Influence vs. Principal

Absolute influence (Curriculum) =MAX(P32B1,P32C1,P32F1)
(Instruction)=MAX(P32B2,P32C2,P32F2)
(Discipline) =MAX(P34B2,P34C2,P34F2)
(Hiring) =MAX(P33B2,P33C2,P33F2)
(Firing) =MAX(P34B1,P34C1,P34F1)

Influence vs. Principal

(Curriculum) =MAX(P32B1,P32C1,P32F1)-P32A1
(Instruction)=MAX(P32B2,P32C2,P32F2)-P32A2
(Discipline) =MAX(P34B2,P34C2,P34F2)-P34A2
(Hiring) =MAX(P33B2,P33C2,P33F2)-P33A2
(Firing) =MAX(P34B1,P34C1,P34F1)-P34A1

P32A1-P32G2, P33A1-P33G2, P34A1-P34G2, "Using the scales provided, how much actual influence do you think each of the following people or organizations has on establishing the curriculum, determining the instructional methods used in the classroom, allocating school funds, hiring new full-time teachers, dismissing or transferring teachers and setting disciplinary policy?"

Objects: "School head," "Superintendent," "Central office administrators," "Teachers at this school," "Parents," "School Board or governing board," and "Teachers' associations or unions."

Response options - 1 ("none") to 6 ("a great deal").

Freedom from Constraint/Cooperativeness

Freedom from Constraint=MIN(P37A2,P37A3,P37A4)
Cooperativeness=MIN(P37C2,P37C3,P37C4)

P37C1-P37C5, P37A1-P37A5. "On a scale of 1 to 6, how would you characterize your school's relationship with each of the following individuals or groups in terms of constraint, predictability, conflict or cooperation?"

Objects: "superintendent," "school board or governing board," "central office administrators."

The following phrase preceded the constraint objects, "How constrained by rules or norms is your school's relationship with the..."

Response options - 1 ("very constrained") to 6 ("very unconstrained").

The following phrase preceded the cooperativeness objects (same 5 as above), "How conflictual or cooperative is your school's relationship with the..."

Response options - 1 ("very conflictual") to 6 ("very cooperative").

Table 2

Monitoring Students

Parental monitoring index=MEAN(FY57A to C, FY60F, FY62A, FY62B)

FY57A to C. "Are the following statements about your parents true or false?"

Objects: "Mother keeps track of Progress in School." Father keeps track of Progress in school." "Parents know where I am,

what I do."

FY60F. "How often do you spend time on the following activities outside of school?"

Object: "Talking with your mother or father."

Response options: "Rarely or never," "Less than once a week," "Once or twice a week," "Every day or almost every day."

FY62A, FY62B. "How much has each of the following persons influenced your plans after high school?"

Objects: "Your father," "Your mother."

Response options: "Not at all," "Somewhat," "A great deal."

Expectations of Students

Expectations Index=MEAN(FCOL,MCOL,BB066)

If BB050A=1, FCOL=1, else=0.
If BB050B=1, MCOL=1, else=0.

BB050A, BB050B. "What do the following people think you ought to do after high school?

Objects: "Your father," "Your mother."

Response options: "Go to college" (1), "Get a full time job" (2), "Enter a trade school or an apprenticeship" (3), "Enter military service" (4), "They don't care" (5), "I don't know" (6), "Does not apply" (7).

BB066. "How far in school do you think your mother wants you to go."

Response options: "Less than high school graduation;" "High school graduation only;" "Vocational, trade, or business school after high school: Less than two years; Two years or more;" "College program: Less than two years of college; Two or more

years of college (including two-year degree); Finish college (four- or five-year degree); Master's degree or equivalent; Ph.D., M.D., or other advanced professional degree;" "Don't know."

Involvement in School

School involvement index=MEAN(FY58A to D)

FY58A to D. "Since the beginning of this school year, how often have your parents (or guardians) participated in the following activities?"

Objects: "Attended a PTA meeting," "Attended a parent-teacher conference," "Visited classes," "Phoned or saw a teacher, counselor or principal when you had a problem."

Response options: "Never;" "Once in a while;" "Often."

Freedom from Constraint/Cooperativeness

P31A1 to P31A5, P37C1 to P37C5. See question wording for same items above, but add objects: "parents," "teachers' association or union (including but not limited to the contract)."

Table 3

Teaching Experience

P49. "How many years of teaching experience have you had?"

Response option: Space provided for two-digit response.

Motivations

P59. How important to you was each of the following reasons in deciding to serve as a principal? Please enter '1' for the

most important reason, '2' for the next important reason, and so on through '8' for the least important reason."

Response options: "Assignment made by superiors;" "Economic benefits (salary, health benefits, pensions);" "Preference for administrative responsibilities;" "Desire for greater control over curriculum;" "Desire for greater control over quality of personnel; "Desire for greater control over other school policies;" "Desire to further your career;" "Desire to take on the challenges of being a principal."

Desire Advancement

P58. "Would you ultimately like to move up to a higher administrative position in the field of education?"

Response options: "Yes;" "No."

Role Perception

P07A, P07B. "From each pair of statements listed below, choose the one statement that best describes how you perceive your role as principal."

A. "Choose one: I should represent the interests of parents, leaders, and sponsors of this school," or "I should take personal initiative in selecting and directing school policy according to my best professional judgment."

B. "Choose one: I should effectively and efficiently manage the day-to-day affairs of this school," or "I should lead this school in new educational directions according to my best professional judgment."

Leadership Perceived by Teachers

Teacher-leadership index=MEAN(T19K,R,HH,JJ,S)

T19K,R,HH,JJ,S. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Objects: K, "The principal sets priorities , makes plans, and sees that they are carried out." R, "The principal knows what kind of school he/she wants and has communicated it to the staff." HH, "The principal lets staff members know what is expected of them." JJ, "The principal is interested in innovation and new ideas." S, "The school's administration knows the problems faced by the staff."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

Instructional Leadership

Inst leadership index=(T03A+T03C+T19T)/ZSCOR(T03A,T03C,T19T)

T03A, T03C. "To what extent has each of the following helped you improve your teaching or solve an instructional or class management problem?"

Objects: A, "Principal or school head." C, "Other school level administrators."

Response Options: 0 ("Hindrance"), 1 ("No Help") to 6 ("Extremely Helpful").

T19T. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Object: "In this school I am encouraged to experiment with

my teaching."

Response Options: 1 ("Strongly Disagree") to 6 ("Strongly "Agree").

Table 4

Goals

P06A to P06H. "How important do you regard each of the following educational goals for your school? Please enter '1' for most important goal, '2' for the next most important goal, and so on through '8' for the least important goal."

Objects: "Basic literary skills (reading, math, writing, speaking);" "Citizenship (understanding institutions and public values);" "Specific occupational skills;" "Good work habits and self discipline;" "Academic excellence, or mastery of subject matter;" "Personal growth and fulfillment (self-esteem, personal efficacy, self-knowledge);" "Human relations skills (cultural understanding, getting along with others);" "Moral and religious values."

General Graduation Requirements

```
English & History=MEAN(P01A1,P01D1)
Science & Math    =MEAN(P01B1,P01C1)
Foreign Language =P01E1
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P01A1 to P01E1. "How many years of instruction are all students in your school required to complete for graduation in each of the following subject areas?"

Objects: "English/Language Arts;" "Mathematics;" "Science," "History and social studies;" "Foreign Language."

Schoolwide Homework Policy

Policy index=1, if response to P36B, P36C or P36D; else=0.

P36B to P36D. "How would you describe your school's policy regarding the amount of homework that should be assigned?"

Objects: "Department heads and/or school/district administrators set upper limits;" "Department heads and/or school/district administrators encourage an increase in amount of homework assigned;" "Department heads and/or school administrators set minimums for certain subjects."

Goal Clarity

Goal Clarity index=MEAN(T19M, T19R)

T19M, T19R. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Objects: M, "Goals and priorities for the school are clear," R, "The principal knows what kind of school he/she wants and has communicated it to the staff."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

Goal Disagreement

Variance of each goal in each school; for each school add VAR(T07A)+ VAR(T07B)+...+VAR(T07H).

T07A to T07H. "If you had to choose from among the eight goals for students listed below, how would you rank them according to their importance in your teaching? Enter a '1' for the most important goal, a '2' for the next most important goal, and so on, through '8' for the least important goal."

Objects: "Basic literary skills (reading, math, writing, speaking);" "Academic excellence, or mastery of the subject matter of the course;" "Citizenship (understanding institutions and public values);" "Specific occupational skills;" "Good work habits and self-discipline;" "Personal growth and fulfillment (self-esteem, personal efficacy, self-knowledge);" "Human relations skills (cultural understanding, getting along with others);" "Moral or religious values."

See section above, "Goals," for description of principal items (P06A to P06H).

Disciplinary Policy

```
Ambiguity=MEAN(MEAN(SB054A,FY21A)+MEAN(SB054B,FY21B)
                +MEAN(SB054C,FY21C)+MEAN(SB054D,FY21D))
Fairness & Effectiveness=MEAN(FY67F,FY67H)
```

SB054A to SB054D, FY21A to FY21D. "Listed below are certain rules which some schools have. Please indicate whether or not each is enforced in your high school."

Objects: "School grounds closed to students at lunch;" "Students responsible to the school for property damage;" Hall passes required;" "'No smoking' rules."

Response options: "Yes," or "No."

FY67F, FY67H. "Please rate your school on each of the following aspects."

Objects: "Effectiveness of discipline;" "Fairness of discipline."

Response options: "Poor," "Fair," "Good," "Excellent," "Don't know."

Availability of Materials

T19Z. "Using the scale provided, indicate the extert to which you agree or disagree with each of the following statements."

Object: "Necessary materials(e.g. textbooks, supplies, copy machine) are readily available as needed by the staff."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

Table 5

Barriers to Hiring

P19G, P19H. "Using the scale provided, how much of a barrier do you consider each of the following factors to be in obtaining teachers with excellent qualifications?"

Objects: "Too many teachers transferred to this school by the central office;" "Too much control over hiring decisions in the hands of the central office.

Response options: 1 ("Not a barrier") to 6 ("A very large barrier").

Barriers to Firing

P27B, P27D. "Using the scale provided, how much of a barrier do each of the following factors present to you in firing or refusing to renew the contracts of poor teachers?"

Objects: "Excessively complex formal procedures;" "Tenure rules in your school system."

Hours to Fire

P26. "In a typical non-renewal case for tenured teachers, how many hours would you and your staff have to devote to documenting charges, attending hearings, etc.?"

Response option: Space provided for two digit response.

Percent Excellent Teachers

P29D. "Over the past three years, what percentage of the teachers in your school would you consider to have been..."

Objects: "Poor teachers;" Fair teachers;" "Good Teachers;" "Excellent teachers."

Response options: Three digit space provided for each object.

Teacher Absenteeism

Abesnteeism index=(ZSCOR(SB044))+(ZSCOR(P63/P62B))
-(ZSCOR(SB056E))

SB044. "What is the approximate average daily percentage of teacher absenteeism in your high school?"

Response option: Space provided for three digit response.

P63. "In a typical week how many person days of substitue teaching do you use in this school?"

Response option: Space provided for three digit response.

P62B. "How many full-time equivalent classroom teachers are there at this high school?"

Response option: Space provided for four digit response.

SB056E. "To what degree is each of these matters a problem in your high school?"

Object: "Teacher absenteeism."

Response options: "Serious;" "Moderate;" "Minor;" "Not at all."

Lowest/Highest Teacher Salary

P23A, P23B. "What are the lowest and highest annual salaries currently paid to full-time teachers on your school's payroll?"

Response options: Space provided for 5 digit responses.

No Tenure Offered

P23. "Does your school or school district offer teachers tenure or provide the assurance of a continuing contract?"

Response options: "Yes," or "No."

Percent Tenured Teachers

P23A. "What percentage of the teachers at your school have tenure or its equivalent?"

Response option: Space provided for 3 digit response.

No Union

SB049D. "Which of the following unions or labor associations represent teachers in your high school in contract negotiations?"

Object: "None."

Response options: "Yes;" "No."

Table 6

Principal-Teacher Relations

Prin-Teach index=(T19O+T19W+T19S)/ZSCOR(T19O,T19W,T19S)

T19O, T19W, T19S. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Objects: "Staff members are recognized for a job well done;" "The school administration's behavior toward the staff is supportive and encouraging;" "This school's administration knows the problems faced by the staff."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

Teacher Influence & Control

T01A to T01D. "How much influence do teachers have over school policy in each of the areas below?"

Objects: "Determining student behavior codes;" "Determining the content of inservice programs;" "Setting policy on grouping students in classes by ability;" "Establishing the school curriculum."

Response options: 1 ("None") to 6 ("A great deal").

T02A to T02E. "Using the scale provided, how much control do you feel you have in your classroom over each of the following areas of your planning and teaching?"

Objects: "Selecting textbooks and other instructional materials;" "Selecting content, topics, and skills to be taught;" "Selecting teaching techniques;" "Disciplining students;" "Determining the amount of homework to be assigned."

Hiring/Firing

P33D2, P34D1. "How much actual influence do you think each

of the following people and organizations has on..."

Objects: "Hiring new full-time teachers;" "Dismissing or transferring teachers."

Response options: 1 ("None") to 6 ("A great deal").

Routine & Paperwork Interference

T19U. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Object: "Routine duties and paperwork interfere with my job of teaching."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

Teacher-Teacher Relations

Curriculum Coordination

Curriculum Coord index=MEAN(T13,T19C,T19KK)

T13. "Since the beginning of the current school year, how much time per month (on the average) have you spent meeting with other teachers on lesson planning, curriculum development, guidance and counseling, evaluation of programs, or other collaborative work related to instruction?"

Response options: "Less than 15 minutes;" "15-29 minutes;" "30-59 minutes;" "1 hour or more, less than 5;" "5 hours or more, less than 10;" "10 hours or more."

T19C, T19KK. "Using the scale provided, please indicate the extent ot which you agree or disagree with each of the following statements."

Objects: "I make a conscious effort to coordinate the

content of my courses with other teachers;" "I am familiar with the content and specific goals of the courses taught by other teachers in my department."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

Teaching Improvement

Improvement index=(T03B+T03D)/ZSCOR(T03B,T03D)

T03B, T03D. "To what extent has each of the following helped you improve your teaching or solve an instructional or class management problem?"

Objects: "Department Chair;" "Other teachers."

Response options: 0 ("Hindrance"), 1 ("No Help") to 6 ("Extremely Helpful").

Collegiality

Collegiality Index=MEAN(T19D,T19E T19DD,T19GG,T12)

T19D, T19E, T19DD, T19GG. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Objects: "You can count on most staff members to help out anywhere, anytime - even though it may not be part of their official assignment;" "Most of my colleagues share my beliefs and values about what the central mission of the school should be;" "There is a great deal of cooperative effort among staff members;" "This school seems like a big family; everyone is so close and cordial."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

T12. "Since the beginning of the current school year, how often have you participated in predominantly faculty social activities (such as potlucks, musical activities, parties, athletic teams, special group efforts to help a colleague)? Exclude contacts that are part of your duties as a coach, leader of a school club, or similar activity."

Response options: "Never;" "1-2 Times;" "3-5 Times;" "6-9 Times;" "10-20 Times;" "More than 20 times."

Table Z

Principal-Teacher Differences

Administrator's Knowledge	=P35F-T19S
Staff Involvement	=P35E-T19Q
Staff Recognition	=P35D-T19O
Experiment Encouragement	=P35J-T19T
Material Availability	=P35O-T19Z
Staff Cooperation	=P35M-T19DD
Routine Interference	=P35G-T19U
Teaching Innovation	=P35C-T19X
Staff Performance Stds.	=P35I-T19EE

P35C to P35G, P35I, P35J, P35M, P35O. "Using the scale below, indicate the extent to which you agree or disagree with each of the following statements regarding your school. Please consider the term 'staff' as referring to the administrative personnel and the teachers combined."

Objects: "Teachers are continually learning and seeking new ideas;" Staff members are recognized for a job well done;" "Staff members are involved in making decisions that affect them;" "The administration knows the problems faced by the staff;" "Routine duties and paperwork interfere with the job of teaching;" "Staff members maintain high standards of performance for themselves;"

The administration encourages teachers to experiment with their teaching;" There is a great deal of cooperative effort among staff members;" "The teachers' union (or education association) and the school administration work together to improve the achievement of students in this school."

Response options: 1 ("Strongly Disagree") to 6 ("Strongly Agree").

T19O, T19Q, T19S, T19T, T19U, T19X, T19Z, T19DD, T19EE. "Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements."

Objects: "Staff members are recognized for a job well done;" "Staff are involved in making decisions that affect them;" "This school's administration knows the problems faced by the satff;" "In this school I am encouraged to experiment with my teaching; "Routine duties and paperwork interfere with my job of teaching;" "Teachers in this school are continually learning and seeking new ideas;" "Necessary materials (e.g. textbooks, supplies, copy machine) are readily available as needed by the staff;" "There is a great deal of cooperative effort among staff members;" "Staff members maintain high standards of performance for themselves."

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